

Work Order ID 161384

Monday, May 15, 2017 11:47:01 AM

161384

Page 1

Item ID: 647.7501

Revision ID:

Item Name: Lower Cutter Assembly

Start Date: 5/15/2017 Start Qty: 3.00

Required Date: 5/30/2017 Req'd Qty: 3.00

Reference: SCHEDULED

Accept

N900040100

Setup Start ***NS1***

Stop ***NS2***

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date: MAY 15 2017

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
647.7500	A

110 Pick Kit 0.00

110

Packaging

Memo

0.00

Packaging

DAS
6
9-89

JUN 28 2017

120

120

Small Fab

Memo

2.79

Small Fab

Assemble as per dwg and apply loctite 598 on all faying surfaces per note 2.

A/R RTV LOCTITE 598
exp. date: 04/19

137797

1X

17/06/23

DAS
36
9-89

130

130

QC

Memo

0.06

Quality Control

QC5- Inspect part completeness to step on W/O

DAS
38
9-89

JUN 23 2017

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	☐	Past Due ☐							

Work Order ID 161384

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161384

Page 2

Item ID: 647.7501 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Lower Cutter Assembly
Start Date: 5/15/2017 Start Qty: 3.00 ***3*** Cust Item ID:
Required Date: 5/30/2017 Req'd Qty: 3.00 ***3*** Customer:
Reference: SCHEDULED

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Identify as per dwg & Stock Location: <i>ST CK 034</i>	0.00							
140									
Packaging	Memo	0.03							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV***								
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.30							
Quality Control									

17.06.23

17/6/27

JUN 23 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Page 1

Work Order ID: 161384

161384

Parent Item: 647.7501

647 7501

Parent Item Name: Lower Cutter Assembly

Start Date: 5/15/2017

Required Date: 5/30/2017

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP REV:A 12.10.04 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.7813 *647 7813* Center Plate, Lower		Manufactured	No			110	Each	1.0000	1	<u>3</u>	DAS 6 9-89	JUN 2 0 2017	
									**				
					<u>Location</u> CCK114			<u>Loc Qty</u> 1		<u>Loc Code</u>			
					153834			1					
647.7810 *647 7810* Bracket A		Manufactured	No			110	Each	0.0000	1	<u>3</u>	DAS 6 9-89	JUN 2 0 2017	
									**	161360			
647.7811 *647 7811* Bracket B		Manufactured	No			110	Each	0.0000	1	<u>3</u>	DAS 6 9-89	JUN 2 0 2017	
									**	161350			
646.3015 *646 3015* Blade		Manufactured	No			110	Each	0.0000	2	<u>8</u>	DAS 6 9-89	JUN 2 0 2017	
									**	160182 158880			
647.7601 *647 7601* Lower Deflector Assembly		Manufactured	No			110	Each	0.0000	1	<u>3</u>	DAS 6 9-89	JUN 2 0 2017	
									**	162089			
647.7815 *647 7815* Fwd Bracket		Manufactured	No			110	Each	1.0000	1	<u>3</u>	DAS 6 9-89	JUN 2 0 2017	
									**				
					<u>Location</u> CCK114			<u>Loc Qty</u> 1		<u>Loc Code</u>			
					153331			1					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																								
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Root Cause		FAULT CATEGORY																																																													
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
																						OTHER :																																									

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Work Order ID: 161384

161384

Parent Item: 647.7501

647 7501

Parent Item Name: Lower Cutter Assembly

Start Date: 5/15/2017

Required Date: 5/30/2017

Start Qty: 3.00

Required Qty: 3.00

647.7814 Manufactured No

110 Each 1.0000 1 ~~3~~

647 7814

Fwd Bracket

**

DAS

6
9-89

JUN 20 2017

Location

Loc Qty

Loc Code

CCK114

1

153332

1

647.7816 Manufactured No

110 Each 3.0000 1 ~~3~~

647 7816

Aft Bracket

**

DAS

6
9-89

JUN 20 2017

Location

Loc Qty

Loc Code

CCK114

3

153618

3

647.7817 Manufactured No

110 Each 0.0000 1 ~~3~~

647 7817

Aft Bracket

**

DAS

6
9-89

JUN 20 2017

CCK115

NAS1149FN832P Purchased No

110 Each 2,058.000 26 ~~78~~

NAS1149FN832P

Washer

**

DAS

6
9-89

JUN 20 2017

Location

Loc Qty

Loc Code

GA

358

M135058

208

M136182

40

M136866

110

ST263

1700

M137412

1700

MS21042-3 MS21042L08 Purchased No

110 Each 0.0000 3 ~~9~~

MS21042-3

Nut

**

DAS

6
9-89

JUN 20 2017

MS21042-08 MS21042L08 Purchased No

110 Each 0.0000 13 ~~39~~

MS21042-08

USE MS21042L08

**

DAS

6
9-89

JUN 20 2017

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Shop Packet Print

Page 2

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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Work Order ID: 161384

161384

Parent Item: 647.7501

647 7501

Parent Item Name: Lower Cutter Assembly

Start Date: 5/15/2017

Required Date: 5/30/2017

Start Qty: 3.00

Required Qty: 3.00

NAS1149F0332P

Purchased

No

110

Each

2,677.000

6

18

NAS1149F0332P

Washer

**

DAS

6

JUN 20 2017

9-89

Location

Loc Qty

Loc Code

GA

275

m133709

275

ST260a

1800

m137412

1800

ST262

602

m137075

602

MS27039-08-19

Purchased

No

110

Each

448.0000

7

21

MS27039-08-19

Screw

**

DAS

6

JUN 20 2017

9-89

Location

Loc Qty

Loc Code

GA

30

m135948

26

m137178

4

over006

200

m137464

200

ST277

218

m137320

18

m137361

200

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified	☐	Past Due	☐				

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Work Order ID: 161384

161384

Parent Item: 647.7501

647 7501

Parent Item Name: Lower Cutter Assembly

Start Date: 5/15/2017

Required Date: 5/30/2017

Start Qty: 3.00

Required Qty: 3.00

MS27039-1-19

Purchased

No

110

Each

447.0000

3

MS27039-1-19

Screw

**

Location

Loc Qty

Loc Code

GA

80

m134134

80

over006

300

m137361

300

ST280

67

m137075

67

MS27039-08-24

Purchased

No

110

Each

152.0000

6

MS27039-08-24

Screw (MS27039-0824)

**

Location

Loc Qty

Loc Code

GA

115

124326

115

ST277

37

124326

37

DAS 6 9-89 JUN 20 2017

DAS 6 9-89 JUN 20 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

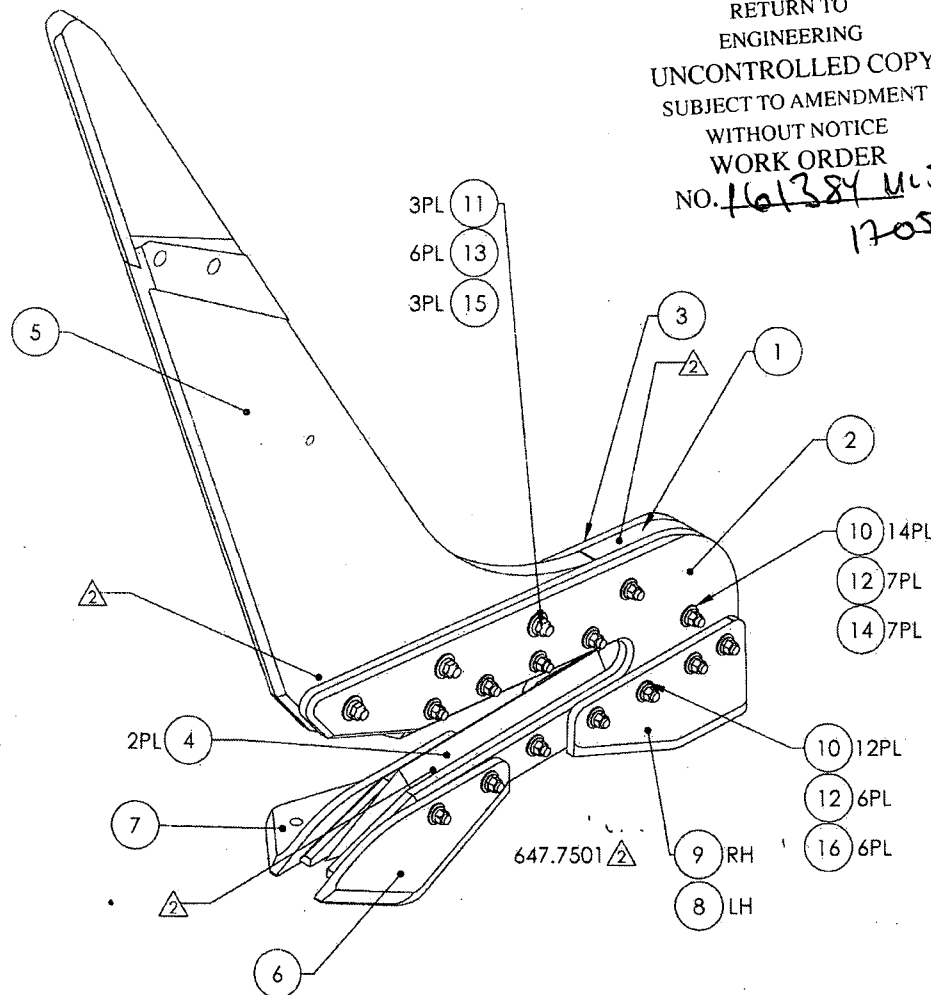
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NOTES:

1. IDENTIFY IAW MPP-120
2. APPLY F/N 17 AS REQUIRED TO ALL FAYING SURFACES UPON ASSEMBLY

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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 161384 ULS
1705-15



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION PR2		N/C
2	INITIAL RELEASE	12/21/99	P. BRAVO
3	INCORPORATED ECH 62940	07/16/00	P. BRAVO

A/R	17	601.2045	RTV, LOCTITE 598		
6	16	601.3124	SCREW	MS27039-0824	
3	15	601.1948	SCREW	MS27039-1-19	
7	14	601.2765	SCREW	MS27039-0819	
6	13	601.1607	WASHER	NAS1149F0332P	
13	12	601.2973	LOCKNUT	MS21042-08	
3	11	601.2943	LOCKNUT	MS21042-3	
26	10	601.2764	WASHER	NAS1149FN832P	
1	9	647.7817	AFT BRACKET		
1	8	647.7816	AFT BRACKET		
1	7	647.7814	FORWARD BRACKET		
1	6	647.7815	FORWARD BRACKET		
1	5	647.7601	LOWER DEFLECTOR ASSY		
2	4	646.3015	BLADE		
1	3	647.7811	BRACKET B		
1	2	647.7810	BRACKET A		
1	1	647.7813	CENTER PLATE LOWER		
7501	7501	647.7501	LOWER CUTTER ASSY		2
QTY	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.

PARTS LIST			
NEXT ASSY (\$)		ORIGINAL DATE	11/24/00
647.7300		DRAWN BY	A. QUAN
		CHECKER	P. BRAVO
		DESIGNED BY	
		APPROVAL	
		CONTRACT NO.	
		UNLESS OTHERWISE SPECIFIED	
		DIMENSIONS ARE IN INCHES	
		TOLERANCES ARE:	
		2 PLACE DECIMALS .XX	
		3 PLACE DECIMALS .XXX	
		ANGLES ± .5°	
		SIZE	8 07M26
		DWG. NO.	647.7500
		SCALE	NONE
		SHEET	1 OF 2

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300
LOWER CUTTER ASSY

DQA: _____ Date: _____



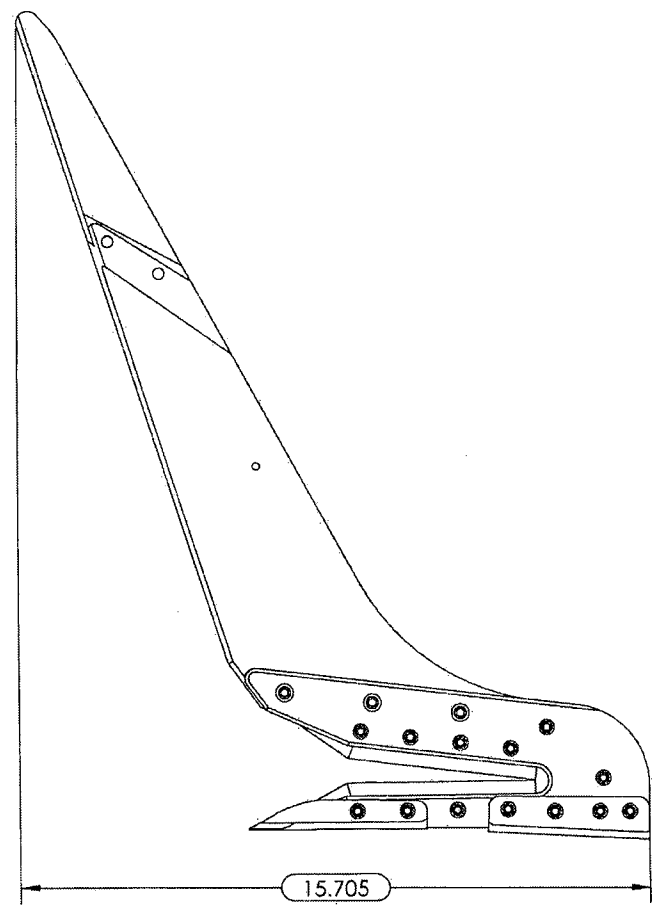
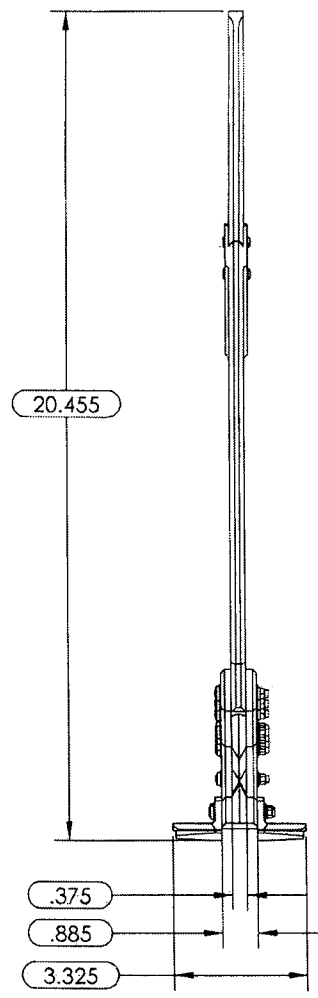
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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ORIGINAL DATE 11-24-09		APICAL INDUSTRIES	
DRAWN BY A. QUAR		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
CHECKED BY P. BRAVO		LOWER CUTTER ASSY	
DRAWING APPROVAL P. BRAVO		REV. A	
DATE 11-24-09		SCALE NONE	
CONTRACT NO.		SHEET 2 OF 2	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		SIZE CASH CYCLES B 07MZ6 DWG. NO. 647.7500 SCALE NONE	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
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